

Amendments to the Specification:

Please amend the paragraph at lines 6-8 on page 11 as follows:

The lower rigid rollers 54 are housed in a rigid roller holder 70 which allows vertical movement of the lower rigid rollers 54 by means of a ~~tempsonic~~ Tempsonics® controlled rigid roller hydraulic cylinder 72 (Tempsonics® is a trade mark of MTS® Systems Corporation, Minnesota, U.S.A. for magnetostrictive linear position sensors).

Please amend the paragraph at lines 9-14 on page 11 as follows:

The rigid roller holder 70 is equipped with four rigid roller linear bearing carriages 74, which are attached to two rigid roller linear bearing guideways 76 bolted to the roller stand 64. This allows the rigid roller holder 70 to be held in place and guided while being activated by a ~~tempsonic~~ Tempsonics® controlled rigid roller hydraulic cylinder 72. The ~~tempsonic~~ Tempsonics® controlled rigid roller hydraulic cylinder 72 is mounted by bolts 78 to the roller stand 64. The hydraulic cylinder rod end 80, which is threaded, is attached to the rigid roller holder 70.

Please amend the paragraph bridging pages 11 and 12 as follows:

As depicted schematically in Figure 13, the ~~tempsonic~~ Tempsonics® controlled rigid roller hydraulic cylinder 72 brings the tubular member 4 into a center position. The tubular member is held centered in the chuck 18 and clamp rollers 52 and 54, which allows equal forces to be applied during the seaming process, while the tubular member 4 is rotated in an axial direction through the machine. The ~~tempsonic~~ Tempsonics® controlled rigid roller hydraulic cylinder 72 is held in place by a counterbalance valve 86, which maintains the cylinder position at all times until smooth lowering is required to clear the tubular member 4 during exiting or entering the machine.

Please amend the paragraph at lines 7-17 on page 18 as follows:

In a preferred embodiment the laser may be a StockerYale Lasiris™ MFL-670-5-1-65 with 5 mW line generator producing a 13 μm x 1 mm line at 670 nm and the detectors may be a Edmund Optics silicon detector 54-034 with 16.4 mm² active area, operation in unbiased (photovoltaic) mode with the voltage measured across a 100 k ohm resistor. In measuring the input from the detectors a National Instruments PCI-6070E data acquisition card may be used which has a 1.25 MS/s maximum sampling speed with 12-bit accuracy. An analog voltage proportional to the amount of reflected laser radiation is produced. The laser and the detector assembly are kept at a constant distance (focal length) from the section of the slotted tubular member 4 being measured to ensure accuracy and reduce errors in the final measurement of slot width. Alternatives to these lasers, detectors and data cards may be used and are well known in the art.

Please amend the paragraph at lines 3-10 on page 19 as follows:

Signals sent to the clamp roller assembly 6 serve to manipulate the ~~temposonics~~ Temposonics® controlled rigid roller hydraulic cylinder 72 such that the pressure applied to this cylinder locates the rigid rollers 54 so as to center and support the slotted tubular member for entry into the seaming roller assembly 8. The exact positioning of the tubular member 4 is important to ensure that equal forces are applied to the tubular member 4 during the seaming process. Signals sent to the seaming roller assembly 8 from the PLC serve to manipulate the seaming roller hydraulic cylinders 100 that in turn vary the force applied by the seaming rollers onto the slotted tubular member 4.

Please amend the paragraph at lines 11-25 on page 19 as follows:

As schematically outlined in Figure 14, the PLC device is activated on loading a slotted tubular member 4 for entry to the head stock assembly 2 and on entering the dimensions of said tubular member 4 including the diameter of the tubular member 4, the hardness of the steel of the tubular member 4 and the desired end slot width from x

to x, into the PLC device. A program within the memory of the PLC then relates the inputted dimensions against a database in order to create a set of parameters for auto processing. Included in this set of parameters are the appropriate speeds for the Head stock drive motors (rack drive motor 36 and quill drive motor 20), the initial starting pressure to be applied to the seaming roller hydraulic cylinders 100 and the amount of pressure to be applied to the tempsonic Temposonics® controlled rigid roller hydraulic cylinder 72. All these values are generated based on calculations performed by the PLC, which take into account the inputted dimensions of the given tubular member compared against retrieved information from a database. After checking the values generated by the PLC manually, the PLC directs a signal to the hydraulic power units 110 and 92 (Seaming roller hydraulic power unit and floating roller hydraulic power unit respectively) to start the hydraulic pump (not shown). The auto process is then initiated via a manual push button control (not shown).

Please amend the paragraph bridging pages 19 and 20 as follows:

On initiation, the PLC sends signals to the multiple assemblies 2, 6, 8 to perform three functions: a signal is related to the Head stock drive motors (rack drive motor 36 and quill drive motor 20) to correlate the speed of the motors with the dimensions inputted for the tubular member; a signal is sent to the tempsonic Temposonics® controlled rigid roller hydraulic cylinder to position the rigid rollers 72 so as to center and support the given tubular member; and a signal is sent to proportional amplifier 116 to set the initial starting pressure to be applied to the seaming roller hydraulic cylinders 100 that correlates with the dimensions of the given tubular member. The PLC continuously performs a self check of the rotational speed and head stock assembly motion using encoders built into the rack drive motor 36 and quill drive motor 20. The encoders are pulse generators that send a signal back to the PLC to the degree of 1024 pulses/revolution.